PCBM + ELL

EUMOTHORAX Pneumothorax \leftrightarrow (air \land emphysema \land right_apical_lung) \lor (emphysema \land right_apical_lung) \land left_apical_lung \lor (air \land drainage \land right_apical_lung $\land \neg$ left_apical_lung $\land \neg$ lung_apices) \vee (air $\wedge \neg$ right_apical_lung \wedge left_apical_lung $\wedge \neg$ lung_apices $\wedge \neg$ emphysema)



 \land right_plural $\land \neg$ crowd $\land \neg$ low $\land \neg$ right_ventricle) \lor (collapse \land crowd \land $drainage \land left_pleural \land low \land pleural_unpec \land right_apical_lung \land right_diaphragm$ ∧ right_pleural ∧ right_ventricle

PCBM + ELL **Effusion** \leftrightarrow left_pleural \land pleural_unspec



Expert1 Effusion \leftrightarrow left_pleural ∧ right_pleural ∧ pleural_unspec



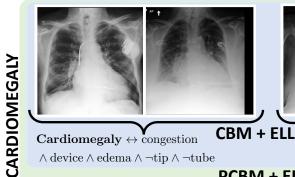
Expert2 $\textbf{Effusion} \leftrightarrow \textbf{right_pleural}$ ∧ pleural_unspec



Expert3 Effusion \leftrightarrow left_pleural ∧ pleural_unspec



Expert4 **Effusion** \leftrightarrow pleural_unspec



Cardiomegaly \leftrightarrow congestion \land device \land edema $\land \neg$ tip $\land \neg$ tube



No Cardiomegaly \leftrightarrow congestion



Expert1 Cardiomegaly \leftrightarrow heart_size \land enlarge



Expert2 Expert3 Cardiomegaly \leftrightarrow chf ${\bf Cardiomegaly} \leftrightarrow$ \land enlarge $\land \neg$ hernia heart_size \land drainage $\land \neg$ distention \land congestion \land pressure \land heart_size \land engorgement



 $\begin{array}{c} \textbf{Expert4} \\ \mathbf{Cardiomegaly} \leftrightarrow \mathbf{wire} \end{array}$ $heart_size \land \neg left_apical_lung$ \land edema $\land \neg$ mediastinal \land enlarge $\land \neg$ congestion \land disease \land engorgement



PCBM + ELL

 \land enlarge \land heart_size \land ¬congestion \land ¬emphysema \land ¬spine)

Cardiomegaly \leftrightarrow (chf \land engorgement \land enlarge) \lor (edema \land engorgement

CBM + ELL $\mathbf{Pneumothorax} \leftrightarrow \mathbf{emphysema}$



Expert1 $\mathbf{Pneumothorax} \leftrightarrow$ $right_apical_lung \land$ right_lung_unspec



Expert2 $\mathbf{Pneumothorax} \leftrightarrow$ right_apical_lung∧ right_lung_unspec



Expert3 $\frac{\textbf{Pneumothorax} \leftrightarrow \textbf{Pneumothorax} \leftrightarrow \textbf{Pneumo$ left_apical_lung



right_apical_lung

Expert4



Pneumothorax \leftrightarrow emphysema∧ left_lung_unspec

MOIE

MOIE